PARACYMUS TARSALIS, A NEW SPECIES FROM THE NORTHWESTERN UNITED STATES (COLEOPTERA: HYDROPHILIDAE)

By DAVID C. MILLER[1]

In the course of preparing keys to the species of Hydrophilidae found in the Pacific Northwest for inclusion in the forthcoming Part IV of Dr. M. H. Hatch's *Beetles of the Pacific Northwest,* the following new species came to my attention. It is described here in order to make the name available for use in the above mentioned keys.

Mr. Hugh B. Leech, of the California Academy of Sciences, had independently discovered the species some years ago and has been most generous in allowing me to describe it and to see his material. He has also been kind enough to read the manuscript. Mrs. Helen Houk, of the University of Washington, made the drawings. All material studied has been deposited in the University of Washington collection except where otherwise indicated by the following abbreviations in parentheses following the locality citation (generally equivalent to the source from which the material was originally borrowed): AMNH—American Museum of Natural History, New York; CAS—California Academy of Sciences, San Francisco; CNC—Canadian National Collection, Ottawa; CNHM—Chicago Natural History Museum; DM—Collection of David C. Miller, New York; JS—Collection of Joe Schuh, Klamath Falls, Oregon; SGJ—Collection of Stanley G. Jewett, Salem, Oregon; UI—University of Idaho, Moscow.

Paracymus tarsalis Miller, NEW SPECIES

MALE: Length 2.3-2.7 mm.; form broadly oval; dorsal surface shining dark olive green with the elytra and pronotum laterally and the elytra apically paler, usually brownish; entire dorsal surface strongly and evenly punctate, all parts about equally so; venter dark brown to black, maxillary palpi except for apical segment, antennae basal to cupule, and trochanters generally paler; antennae eight-segmented; protarsal segments thickened, all but apical one broader than long, apical segment bearing a single blunt tooth on inner edge midway to apex and usually a short peg arising from socket of claws, claws very broad and blade-like, anterior one much larger (Figs. 1, 2); metafemora lightly strigate in anterior half; mesosternal projection small, broad and tooth-like; parameres broad, in dorsal view narrowing from about one-third of the way from base to apex, basal piece about twice the length of the parameres (fig. 4).

FEMALE: Externally identical to the male except that the protarsal segments are not thickened and bear no teeth or pegs, and the claws are narrow, not broad and blade-like. Since it is sometimes difficult to separate the female of this species from that of *P. subcupreus* (Say), no allotype or female paratypes are designated.

Holotype: Male, Lakeview, Oregon, June 27-28, 1951, Borys Malkin.

Paratypes (all male): IDAHO: 4, Alturas L. (Sawtooth Mts.) (1, CNHM; 1, DM); 4, Rogerson (Twin Falls Co.) (1, CNHM; 1, UI). OREGON: 1, Aspen L. (JS); 1, Baker Cr. (CAS); 1, Cave Junction (CNHM); 6, Chiloquin (Sprague R.) (1, CNHM; 2, DM); 3, Corvallis

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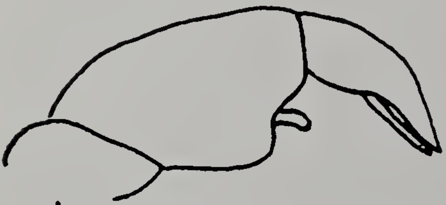
(1, AMNH; 1, JS; 1, CNC); 1, Crump Lake (JS); 2, Lakeview (1, CNHM); 1, Lunch Cr. (Dixie Pass, Blue Mts.) (CNHM); 2, McMinnville; 3, Meryl Cr. (7 mi. N.W. Bly, Klamath Co.) (JS); 2, Roseburg (SGJ); 4, Union Cr. (Jackson Co.) (3, CNHM; 1, DM). CALIFORNIA: 1, Lakeport (1 mi. W. Rockey Pt., Lake Co.) (CAS); 2, Middletown (6.9 mi. N. of) (Lake Co.) (CAS); 1, The Indians (2 mi. S.E. of Santa Lucia Mem. Park, Monterey Co.) (CAS); 2, Trinity Center (Scott Mt. Divide, Trinity Co.) (CAS); 4, Wilson L. (Tehama Co.) (CAS).

In addition to females associated with males from many of the above localities, females probably of this species have been seen from the following localities: IDAHO: Galena (Blaine Co.); Malad City (Little Malad R.). OREGON: Chewaucan R. (Lake Co.); Deming Cr. (Klamath Co.); Redmond (Deschutes R.); Seneca; Steens Mts. (Fish L.). CALIFORNIA: Childs Meadow (Tehama Co.).

The only other species of *Paracymus* which has a range overlapping that known for *P. tarsalis* n. sp. is *P. subcupreus* (Say). *P. tarsalis* runs to *subcupreus* in the currently used keys (Winters 1926, Leech and Chandler 1956). Males of *tarsalis* can be easily separated from *subcupreus* by their larger protarsi with much more enlarged and flattened claws (figs. 1-3) and by their aedeagi (figs. 4-5). Females are more difficult to separate,



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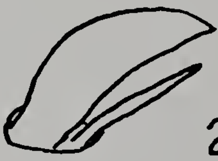

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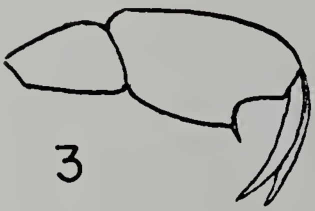

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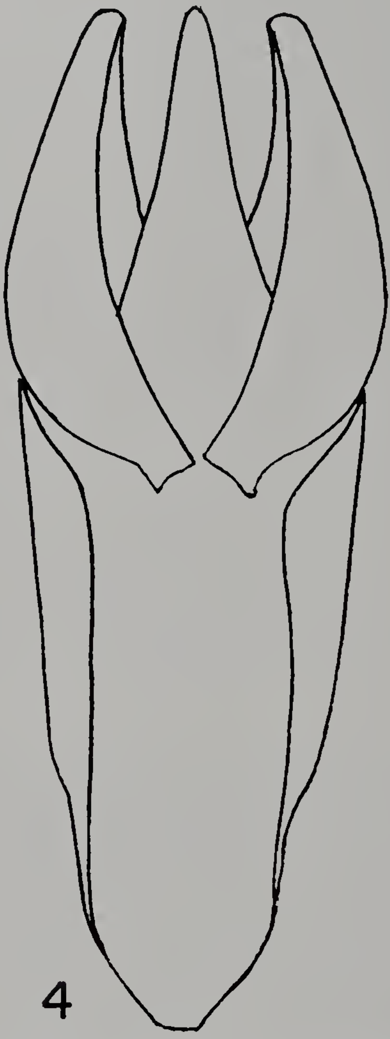

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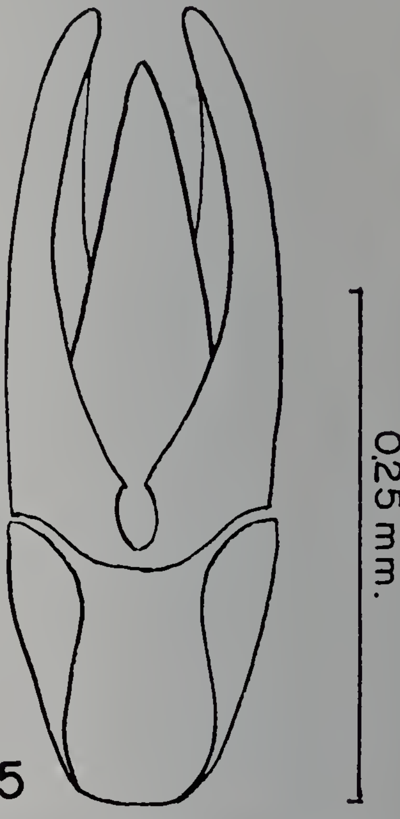

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FIGURES 1, 2, 4, *Paracymus tarsalis* n. sp. 1—Terminal segments of male protarsus, lateral view. 2—Same, anterior view. 4—Aedeagus.

FIGURES 3, 5, *Paracymus subcupreus* (Say). 3—Terminal segments of male protarsus, lateral view. 5—Aedeagus.

but those of *tarsalis* average slightly larger and are more thickly and coarsely punctate. The punctation of *tarsalis* is approximately equal over the entire dorsum, while that of *subcupreus* is somewhat coarser and thicker on the head and elytra than on the pronotum.

As has been previously pointed out (Fall 1901:218, Winters 1926: 57), *P. subcupreus* (Say) is somewhat variable with respect to the male protarsus. The aedeagus also varies, and it is possible that specimens from western North America do not represent the true *subcupreus*. A study of material from many localities will probably be necessary to settle this point.

LITERATURE CITED

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CURRENT RESEARCH PROGRAMS

These announcements of research underway on beetles are not meant to be requests for specimens or information unless stated to the contrary; a letter to the researcher will determine whether or not specimens or information are wanted. All research workers are invited to send notices of research in progress to the Editor.

BRUCHIDAE: Revision of *Megacerus*. By Arturo L. Teran, Depart. de Zoologica, Universidad Nacional de Tucuman, Instituto Miguel Lillo, Tucuman, Argentina.

CANTHARIDAE: Revision of Nearctic *Silis*. By J. W. Green, California Academy of Sciences, Golden Gate Park, San Francisco 18, Calif.

CHRYSOMELIDAE: Faunistic Study of Chrysomelidae of Alabama. By Edward U. Balsbaugh, Jr., Dept. of Zoology and Entomology, Auburn Univ., Auburn, Ala.

COLYDIIDAE: Study of *Lasconotus* of California. By John Drew, Division of Entomology and Acarology, Univ. of California, Berkeley 4, Calif.

DYTISCIDAE: Taxonomy of *Thermonectus* Dejean. By Kenneth L. McWilliams, Dept. of Biology, New Mexico State Univ., University Park, N. M. (Need specimens for study.)

GENERAL: Compiling Second Bibliographical Supplement to Taxonomic and Major Ecological Literature on Coleoptera. By J. Gordon Edwards, San Jose State College, San Jose, Calif.

SCARABAEIDAE: Revision of *Cotinus*. By Michael A. Goodrich, Dept. of Zoology and Entomology, Pennsylvania State Univ., University Park, Pa.

TENEBRIONIDAE: Reproduction and development in *Tribolium confusum*. By Melissa Stanley, Zoology and Entomology Dept., Univ. of Utah, Salt Lake City, Utah.